



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/578,702

12/14/2006

Reinhold Meier

5038.1026

3881

23280 7590 10/24/2008  
Davidson, Davidson & Kappel, LLC  
485 7th Avenue  
14th Floor  
New York, NY 10018

EXAMINER

CADUGAN, ERICA E

ART UNIT

PAPER NUMBER

3726

MAIL DATE

DELIVERY MODE

10/24/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/578,702	<b>Applicant(s)</b> MEIER ET AL.	
	<b>Examiner</b> Erica E. Cadugan	<b>Art Unit</b> 3726	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 22 September 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 26-34 is/are pending in the application.
- 4a) Of the above claim(s) 27, 29, 30 and 32-34 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 26, 28 and 31 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>5/10/06</u> .   | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Election/Restrictions*

1. Claims 27, 29-30, and 32-34 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on September 22, 2008.

### *Specification*

2. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: it does not appear that the specification provides antecedent basis for “a second angle between an outside surface of the cutting body and a disk-shaped or plate-shaped surface of the base body” as set forth in claim 28.

Claim 26 sets forth a method for milling recesses 13 into a workpiece 11, comprising: providing a milling tool 10, the milling tool 10 including a base body 14 and at least one cutting body 15 situated on an outer periphery of the base body 14, the cutting body 15 being angled in relation to the base body 14... Note that the cutting body (or bodies) 15 are "angled" in relation to the base body 14 at an angle "PHI" (shown in Figure 1). Claim 28 further recites that "the angle corresponds approximately to a second angle between an outside surface of the cutting body and a disk-shaped or plate-shaped surface of the base body". However, the specification does not appear to mention any "second" angle corresponding to “PHI”, but instead, as described in paragraph 0018, it appears that "PHI" is the angle between the outside surface 18 of the cutting body 15 and the disk-shaped or plate-shaped surface 19 of the base body 14. In other words, it appears that the specification only teaches one such angle, and that the "angled"

Art Unit: 3726

arrangement, and/or the "angle" of claims 26 and 28 is the same angle as the claimed "second angle". In any case, it does not appear that the specification as originally filed provides antecedent basis for any such "second angle..." as set forth in claim 28.

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 26, 28, and 31 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 26 recites the limitation "the cutting body" in line 3. There is insufficient antecedent basis for this limitation in the claim (previously "at least one...").

In claim 28, it is unclear as set forth which angle constitutes "the angle" as set forth, and in what way such "corresponds" to the claimed "second angle" as it would appear that the two angles referred to are the same angle.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

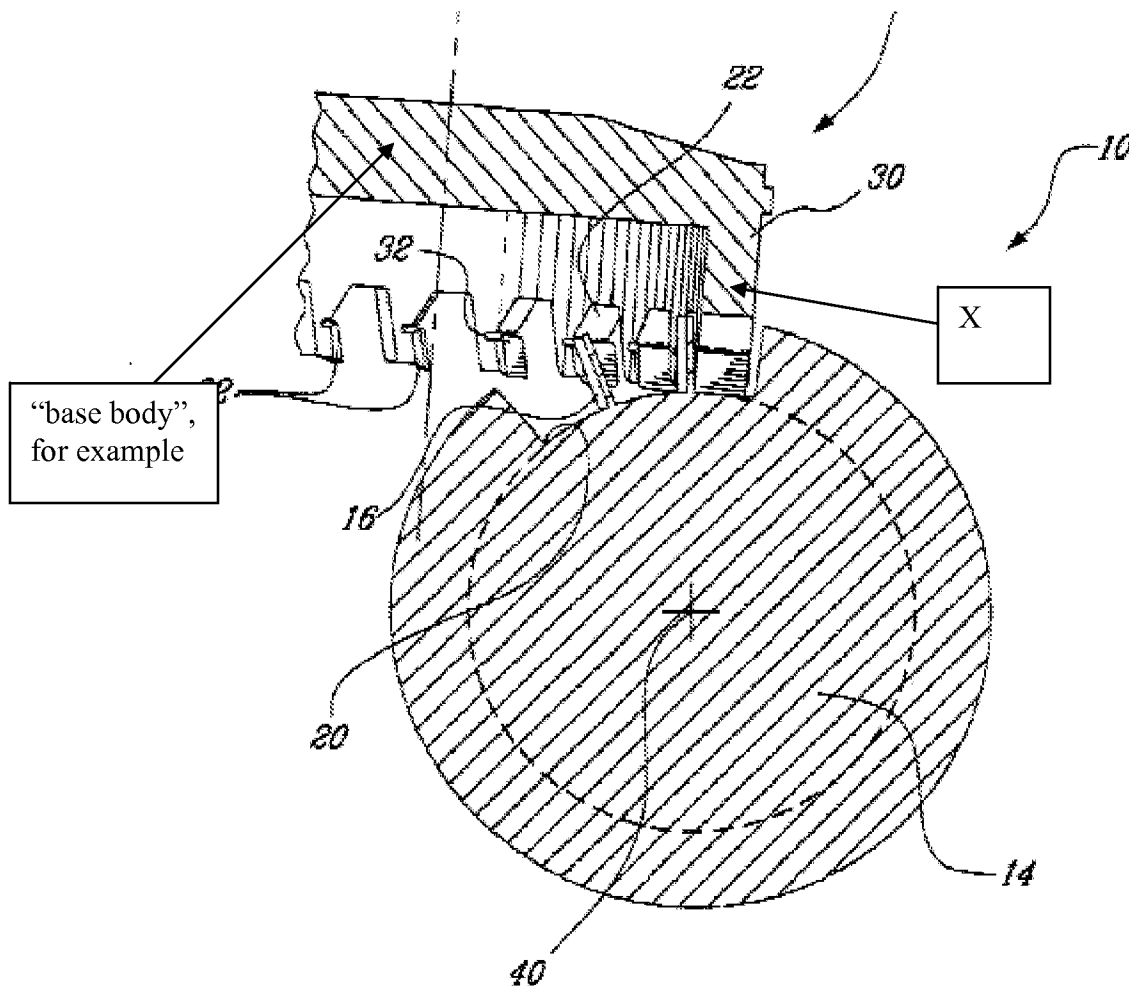
(c) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Art Unit: 3726

6. Claims 26, 28, and 31, as best understood in view of the rejections under 35 USC 112, second paragraph above, are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Pat. No. 6,935,817 to Sasu et al.

Sasu teaches a method for milling recesses (between airfoil blades 12) of a “gas turbine component” (re claim 31; see Figures 1-3 and at least col. 1, lines 5-9, for example). The method uses a milling tool 28 having a disk-shaped or plate-shaped “base body” (labeled below in the partial reproduction of Figure 2) and at least one cutting body (such as either cutting inserts 32, or the combination of cutting inserts 32 with their respective elements “X” as labeled below) that is located on an outer periphery of the “base body”, and which is “angled in relation to” the “base body” (see Figure 2).

Re claim 28 as best understood, note that the “angle” of the “cutting body” described previously appears to “correspond approximately” to an angle between an “outside” surface of the “cutting body” and a (generally horizontal, for example, as viewed in Figure 2) disk-shaped or plate-shaped surface of the “base body” (see Figure 2, for example).



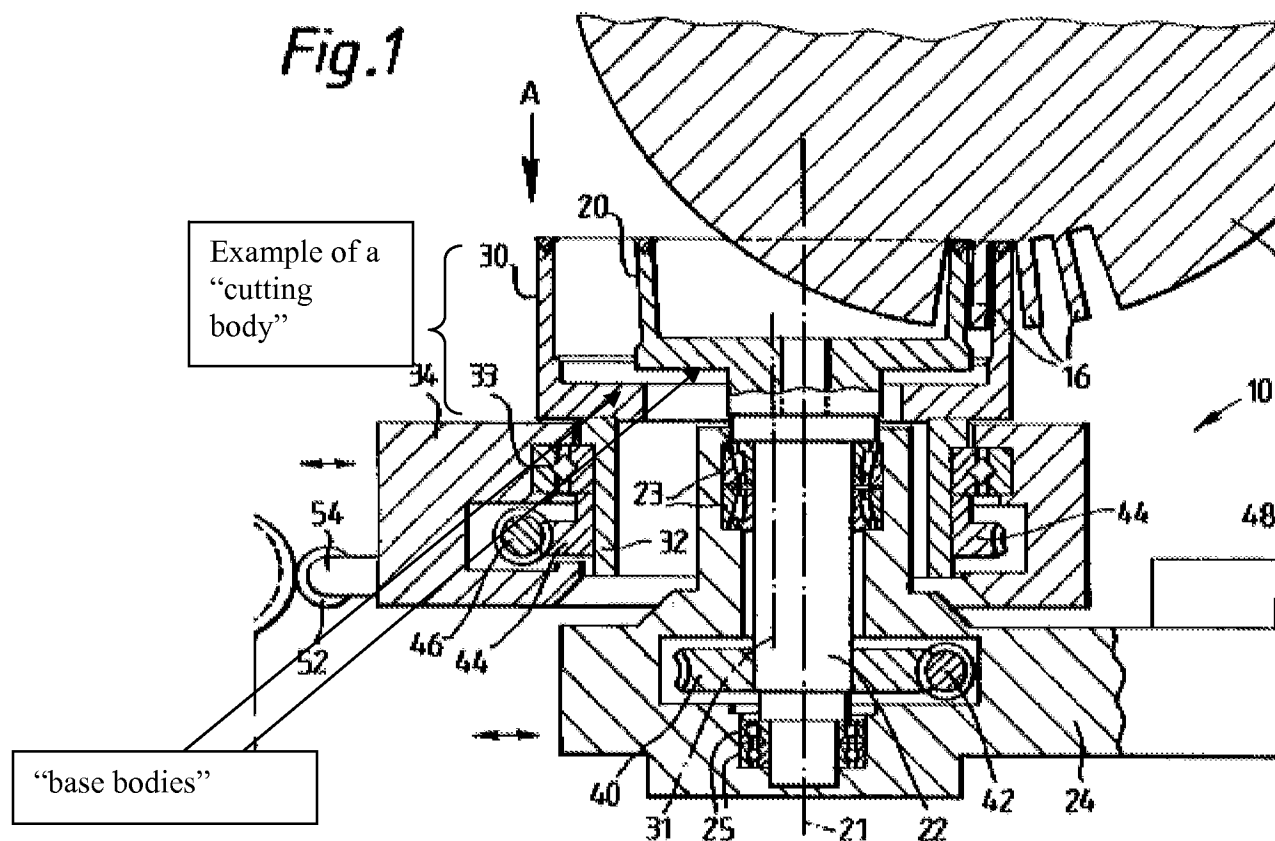
**FIG. 2**

7. Claims 26, 28, and 31, as best understood in view of the rejections under 35 USC 112, second paragraph above, are rejected under 35 U.S.C. 102(b) as being anticipated by GB 2276575 (hereinafter GB '575).

GB '575 teaches a method for milling "recesses" (between blades 16) of a "gas turbine component" (re claim 31; see page 1, first paragraph, as well as Figures 1-2, for example) using a

Art Unit: 3726

milling tool, such as either 20 or 30, for example (see Figure 1) including a plate-shaped or disk-shaped “base body” (see labeled reproduction of a portion of Figure 1 below).



Note that either the legs shown extending vertically from the “base bodies” in combination with the cutting inserts at the ends thereof (the combination labeled above as “Example of a cutting body”) can be considered a “cutting body” located on an outer periphery of the “base body”. Alternatively, the cutting inserts alone can be considered to constitute “cutting bodies” as claimed.

Art Unit: 3726

In either case, note that the “cutting bodies” are “angled” in relation to the base bodies labeled above (see Figure 1).

Re claim 28 as best understood, note that the “angle” of the “cutting body” described previously appears to “correspond approximately” to an angle between an “outside” surface of the “cutting body” and a (horizontal, for example, as viewed in Figure 1) disk-shaped or plate-shaped surface of the “base body” (see Figure 1).

### ***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Erica E. Cadugan whose telephone number is (571) 272-4474. The examiner can normally be reached on Monday-Thursday, 5:30 a.m. to 4:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David P. Bryant can be reached on (571) 272-4526. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would



Application/Control Number: 10/578,702

Page 8

Art Unit: 3726

like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Erica E Cadugan/  
Primary Examiner  
Art Unit 3726

eec  
October 22, 2008